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REMARKS

The Office Action of July 1, 2003, has been carefully considered.

Claims 1 through 4 and 6 through 14 have been rejected under 35 USC 102(b) as anticipated by Jones et al.

The Jones et al patent has been cited to show a combustible gas detection element comprising an electric heater embedded in a pellet, and an outer layer of an inert non-catalytic porous material tending to prevent non-volatile residues from reaching the catalytically active regions of the detector. See column 1, lines 38 through 43. As shown in the drawing figure of Jones et al, the wire filament 2 of platinum is embedded in a pellet 3 consisting of a homogeneous mixture of alumina and an oxidation catalyst material such as palladium or platinum. Surrounding this pellet is a layer 4 of oxidation catalyst material such as palladium and platinum, and a layer 14 of alumina is provided on top of the layer 4 of oxidation catalyst material. The outer non-catalytic layer may also comprise a zeolite.

In contrast with the invention disclosed in Jones et al, the outer layer of the claimed invention is a catalytic layer which reacts with and traps gases and vapors which poison the precious metal catalyst of the inner layer. In order to better define this aspect of the invention, claims 1 and 12 have been amended in accordance with the specification at page 7, lines 8 through 15, to recite that the second layer comprises a catalytic compound which is not substantially active toward combustible gases, but which provides sites which are reactive with and which are capable of trapping gases and vapors which poison the precious metal.

Thus, by definition, the outer layer of the claimed invention is different from the outer layer of Jones et al

which is a non-reactive material.

While the outer layer of the claimed invention may be a zeolite, and the outer layer of Jones et al may also be a zeolite, the outer layer according to the invention would be a metal loaded zeolite which is reactive towards catalyst poisons. Contrary to the statement in the Office action, Jones et al does not teach the use of metal loaded zeolites for the outer layer, since such metal loaded zeolites would be contrary to the definition of the outer layer as being non-catalytic.

Accordingly, the Jones et al reference discloses a combustible gas detection element having an outer layer which traps catalyst poisons, but which is in itself non-reactive and non-catalytic. The claimed invention, on the other hand, teaches an outer layer which is reactive towards catalyst poisons and which is by definition different from the outer layer of Jones et al.

Withdrawal of this rejection is accordingly requested.

Claim 5 has been rejected under 35 USC 103 over Jones et al in view of Cheng et al, which has been cited to show an electric film heater. Cheng et al does not, however, cure the defects of the Jones et al reference as set forth above, and withdrawal of this rejection is requested.

In view of the foregoing amendments and remarks, Applicants submit that the present application is now in condition for allowance. An early allowance of the application with amended claims is earnestly solicited.

Respectfully submitted,

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